NIH/NIAID-Nordic Regional Research Networking Meeting

NIH PEER REVIEW PROCESS

Tracy Allan Shahan, PhD., MBA

Chief, Program Management and Operations Branch

Division of Extramural Activities

National Institute of Allergy and Infectious Diseases

National Institutes of Health

Department of Health and Human Services

Today's talk:

- What is peer review?
- What are the roles of NIH staff?
- Who reviews my application?
- What happens during a review meeting?
- How are applications scored?
- Rules for successful grantsmanship

What is peer review?

- Groups of scientific experts (peers) evaluate the scientific and technical merit of applications.
- NIH staff recruit these experts and make sure that the review meeting is conducted within NIH review guidelines and federal regulations.
- NIH staff may not influence the evaluation of applications.

What are the roles of the NIH staff?

- **Scientific Review Administrators**
  - Questions regarding peer review
- **Program Officers**
  - Scientific aspects of grant before and after peer review
- **Grants Management Specialists**
  - Handle business/budget functions of the grant

Who reviews my application?

- A panel of scientific experts recruited by the Scientific Review Administrator (SRA).
- Experts are chosen based on their:
  - scientific expertise
  - research background
  - review experience
  - lack of conflict of interest with applications

What happens during a review meeting?

- Reviewers discuss the scientific and technical aspects of each application.
- A priority score is given to the application:
  - Outstanding (1.0 - 1.5)
  - Excellent (1.5 – 2.0)
  - Very Good (2.0 – 2.5)
  - Good (2.5 – 3.5)
  - Acceptable (3.5 – 5)
  - NRFC (not recommended for further consideration)

What are the review criteria?

- **Significance**
  - Does this study address an important problem?
- **Approach**
  - Are the conceptual or clinical framework, design, methods, and analyses adequately developed, well integrated, well reasoned, and appropriate to the aims of the project?
- **Innovation**
  - Is the project original and innovative?
- **Investigators**
  - Are the investigators appropriately trained and well suited to carry out this work?
- **Environment**
  - Does the scientific environment in which the work will be done contribute to the probability of success?

Special issues that may affect the score:

- Human subjects
- Vertebrate animals
- Biohazards
- Recombinant DNA
- Select agents
- Model organisms

Budget does not affect score:

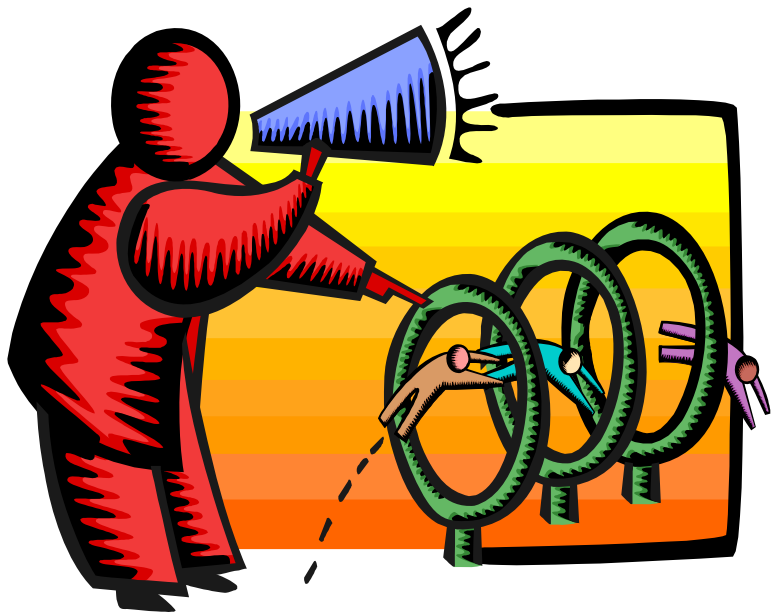
- Reviewers are asked to assess the following regarding budget:
  - Are budget items justified?
  - Are budget items over- or under-estimated?
  - Is the budget appropriate to complete the proposed work?

An OUTSTANDING application will have the following:

- New or original ideas
- Focused and clear research plan
- Knowledge of relevant published work
- Experience with the essential methodology
- Future directions and contingency plans

NIH PEER REVIEW PROCESS

"THE RULES"
for
Navigating the NIH Peer Review System



"THE RULES"

for

Navigating the NIH Peer Review System

RULE 1:

- Your application **must be complete** in itself

YOUR APPLICATION MUST BE COMPLETE IN ITSELF...

- Include everything called for in the PHS 398 kit and the RFA or PA, if relevant
- Address **ALL** of the review criteria
- Make your description as understandable and complete as possible (write it last!)
- Include everything necessary for reviewers to assess your work

"THE RULES"

for

Navigating the NIH Peer Review System

RULE 2:

- Make it **easy** for the reviewers

MAKE IT EASY FOR THE REVIEWERS...

- Present clear overall organization
- Be concise
- Make your application visually appealing: charts, tables, diagrams, flow-charts
- Use appendices well
- Cross-reference, label, number everything
- Write to the 5 Review Criteria, in order

"THE RULES"

for

Navigating the NIH Peer Review System

RULE 3:

- Play it straight

PLAY IT STRAIGHT...

- Lay out potential limitations, problems
- Show how you propose to deal with them
- Don't pad biosketches with irrelevant or trivial items
- Don't intentionally over- or under-estimate the budget
- Don't indulge in blatant self-promotion

"THE RULES"

for

Navigating the NIH Peer Review System

RULE 4:

- Read and carefully follow instructions

CAREFULLY FOLLOW INSTRUCTIONS...

- Follow format and content (PHS 398, 09/2004) guidelines
- Address special requirements of award type or solicitation
- Know the deadlines – special for AIDS, solicited applications (RFA, PA)
- Follow submission instructions (how many copies, to which addresses)

"THE RULES"

for

Navigating the NIH Peer Review System

RULE 5:

- Don't work in a vacuum

DON'T WORK IN A VACUUM...

- Actively seek out collaborations
- Network widely
- Read a successful similar application (and its summary statement)
- Allow enough time for honest feedback from senior investigators

"THE RULES"

for

Navigating the NIH Peer Review System

RULE 6:

- Be aware of changes in science and policies

BE AWARE OF CHANGES IN SCIENCE AND POLICIES...

- Look at NIH home pages on WWW
- Communicate with Program Officers
- Stay in touch with your University Office of Sponsored Programs
- Communicate with Scientific Review Administrators

"THE RULES"

for

Navigating the NIH Peer Review System

RULE 7:

- Don't give up!

DON'T GIVE UP!!

Initial failure is common:
learn from it and succeed – the majority do!

- Study criticisms in summary statement
- Decide if problems are repairable
- Attend diligently to each criticism
- Keep a positive tone and attitude